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Perspective

Improving rates of immunisation in refugee populations in Australia

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Key points

- Refugees are likely to be under-immunised due to a multitude of factors inherent to their countries of origin, considerations while in exile and their circumstances post-resettlement
- Addressing the complexities in the delivery of immunisation services to refugee populations requires a collaborative and multifaceted approach. Policymakers, providers, and refugee communities all have a crucial role to play in this endeavour
- World Health Organization (WHO) guidance can be adapted to the Australian context to provide key policy options to address under-immunisation in refugee populations.

Abstract

Despite an established humanitarian program running for many years, the health needs of refugees resettled in Australia, particularly immunisation, have not been met adequately. Under-immunisation is one of the top health issues for this population. While there is no population-level immunisation coverage data, seroprevalence studies based on small cohorts of refugees show suboptimal immunity to various vaccine-preventable diseases and lower vaccine coverage for this group than the general population. This is compounded by gaps in immunisation policy and service delivery that further perpetuate access issues and may contribute to under-immunisation. This is particularly pertinent against the backdrop of the coronavirus disease 2019 (COVID-19) pandemic, where there have been significant disruptions in the delivery of routine and catch-up immunisations. This paper briefly analyses the status quo and draws on the key policy considerations for enhancing the equitable provision of immunisation for refugees as recommended by the 2019 World Health Organisation technical guidance report to provide a clear, overarching direction for empirical work on immunisation service delivery for refugees in Australia.

Background

As a signatory to the *United Nations Conventions to the Status of Refugees*, Australia is among the countries obliged and committed to resettling refugees. Australia's Refugee and Humanitarian Program includes an offshore component, whereby individuals with formal refugee status can apply for a humanitarian visa and are eligible for permanent residency and resettlement in Australia; and an onshore component that offers protection for asylum seekers entering Australia with or without valid temporary visas.[1] While there has been an established humanitarian program since 1977, the health needs of offshore humanitarian arrivals (hereafter referred to as 'refugees') in Australia, and in particular immunisation needs, have not been adequately met.[2]

Under-immunisation is one of the top 10 health issues commonly identified in refugees after arrival in Australia.[3,4] Refugees arriving in Australia are likely to be under-immunised as they originate from countries that generally have low immunisation coverage rates, and routine immunisation programs that are suboptimal when compared to Australia.[2] Additionally, there are challenges in ensuring high vaccination coverage rates are achieved in transit, in refugee camps and in other settings where many refugees spend years seeking refuge en route to Australia.[2] Upon resettlement, refugees face many challenges navigating the Australian healthcare system which impede their access and use of immunisation services, despite being eligible for government-subsidised healthcare under the Medicare system. These factors include language barriers, limited literacy, cultural differences, and financial and logistical barriers.[5]

Compounding this is the fact that there is no population-level immunisation coverage data for refugees, due to a lack of identifiers in the Australian Immunisation Register (AIR).[6] The available data are from small studies based on screening among cohorts of refugees. These studies (primarily outdated) are limited to serological evidence of immunity to vaccine-preventable diseases included in screening and generally demonstrate limited immunity to most vaccine-preventable diseases.[3,4] A more recent study conducted among refugees attending a refugee clinic in South East Queensland from 2015 to 2018 established the lowest uptake of human papillomavirus, pneumococcal and haemophilus influenza type b catch-up vaccines compared to measles-mumps-rubella, polio and diphtheria-tetanus-pertussis vaccines, based on the Australian age-appropriate National Immunisation Program (NIP) schedule.[7] The authors reported age (younger refugees) and duration of stay in Australia (longer stay) as risk factors for under-immunisation, highlighting the need for targeted vaccine literacy for parents.[7]

Challenges associated with immunisation service delivery for refugees in Australia

Evidence from the literature highlights systemic, provider and client-related challenges contributing to under-immunisation for this group. At the health system level, fragmented service delivery, unclear roles and responsibilities for catch-up, lack of population-level coverage data on immunisation for refugees, and insufficient training of general practitioners (GPs) on refugee-specific immunisation needs are key challenges impacting immunisation service delivery for refugees.[8] In addition, while immunisation providers can currently receive incentive payments for completing and recording NIP schedule points (A$6) (for children < 7 years) and catch-up schedules for overdue vaccines under the NIP schedule (A$6) (for children < 7 years), existing notification systems for these payments do not accurately capture catch-up vaccination for children of refugee background, considering the complexities associated with delivering catch-up for this group.[8,9] At the provider level, factors that have been identified as impacting on service delivery for refugees include uncertainty about the quality of primary health care after refugees transition from refugee-specific health services – particularly concerning expertise in the drafting and implementation of immunisation catch-up schedules for refugee – and the lack of coordination between various stakeholders involved in immunisation service delivery.[8,9] In Victoria, Australia, providers reported catch-up immunisation for refugees to be time- and resource-intensive, typically requiring a minimum of three visits over at least 4 months for completion). Providers face logistical difficulties when caring for multiple family members and providing multiple vaccines across the NIP schedule outside of prescribed NIP age points.[9] At the client level, high mobility post settlement, and change of immunisation service providers are reported as factors that further complicate service delivery, particularly catch-up vaccines for refugees.[4]

Impacts of COVID-19 on immunisation service delivery for refugees

Refugees in Australia face many barriers, including language, cultural, financial and logistical barriers and a lack of familiarity with the healthcare system, which impede their ability to navigate health care services.[10] There is limited published data on the impact of the coronavirus disease 2019 (COVID-19) pandemic on immunisation for refugees in Australia. Nevertheless, the pandemic likely amplified barriers to access and uptake of vaccination services for refugees.[11] Given the disruption of routine immunisation services during the pandemic, there is a need for more targeted primary health care interventions to ensure refugees receive age-appropriate catch-up vaccines according to the NIP

schedule. While there was evidence of potential hesitancy to COVID-19 vaccines fuelled by misinformation among some refugee populations[12], it is unlikely this hesitancy trickled down to other NIP vaccines as refugees have to date been receptive to receiving vaccines.[4,13] Moving forward, health promotion strategies will need to consider the intersecting factors impeding vaccine access and uptake and capitalise on individual, family, community and organisational assets to increase vaccination rates among refugees.[13]

Policy considerations for equitable provision of immunisation to refugees

To ensure equitable provision of immunisation services to refugees, the World Health Organization (WHO) technical guidance[14] recommends consideration of key policy options, which are adapted in the Australian context below:

1. Strengthen the capacity of primary care providers to identify opportunities for vaccination among refugees

Healthcare providers, including GPs and immunisation nurses working in refugee-specific services, must consider every healthcare contact with refugees as an opportunity to vaccinate as per the NIP, including completing catch-up vaccinations as needed. There are currently significant challenges for service delivery, including variability in models of care, compounded by the lack of refugee-specific identifiers in the AIR for tracking and monitoring vaccine uptake.[2] This can result in either over-immunisation or missed opportunities for immunisation.[9] A high degree of integration is needed among all stakeholders involved in delivering immunisation services to refugees, including (but not limited to) primary healthcare providers, refugee-specific service providers, school-based immunisation program coordinators, and local councils.[2] Refugee-specific service providers play a significant role in supporting primary care providers in the continuity of care for refugees.[15] Information sharing and collaboration networks such as the Victorian Refugee Health Network and the Refugee Health Network in Queensland can help enhance immunisation service delivery in primary healthcare through ongoing capacity building, development of catch-up resources, and collaboration on research projects.[2] Primary Health Networks (PHNs) across Australia can also play a role in knowledge dissemination of best practice guidelines for effective immunisation service delivery as well as working directly with GPs to identify and address refugee-specific immunisation needs and service gaps. PHNs can also enhance GPs' confidence and competency by providing ongoing training opportunities focused on refugee health assessments and drafting immunisation catch-up schedules.[2]

2. Consider using intensified targeted initiatives to augment vaccination coverage among underserved refugees

Targeted strategies like drive-through vaccine clinics or other mobile vaccination clinics in areas with high refugee population numbers needing catch-up vaccinations (previously implemented in Melbourne, Victoria)[16] may be considered in some jurisdictions where refugees face significant issues accessing healthcare/immunisation providers. Furthermore, governments may need to consider granting extensions or grace periods for catch-up vaccination for "No jab, no pay" (Federal) and "No jab, no play" (state-based) policies that restrict financial benefits or early childhood care/education access to families with under-immunised children. This would ensure refugee clients are not penalised and can still access family tax benefits and other rebates.[11]

3. Establish or upgrade immunisation information systems to capture vaccination coverage data for refugees

The AIR is key to improving the way we capture immunisation information for refugees and has the potential to enhance service delivery through monitoring vaccination coverage and timely delivery of vaccines.[2] This will, however, only be possible if identifiers for refugees are incorporated into the data collected on the AIR.[2,9] Identification of Aboriginal and Torres Strait Islander children in immunisation registers and inclusion of coverage for Indigenous groups as key performance indicators for states and territories were integral in monitoring vaccine uptake and enhancing immunisation coverage for this population.[17] Adopting similar initiatives for refugees would be a step towards increasing coverage and greater coordination of immunisation services. Tuckerman et al. argue there is a need for core modifications to the AIR, including structural changes such as increasing the capacity of name fields (which are currently capped) to accommodate and accurately capture the names of children of refugee/migrant background, improving the capacity to record vaccines by antigen, and ensuring vaccines given outside of the NIP are accurately captured.[18] The need for integrating 'ethnicity data' in the AIR to capture vaccination coverage for refugees is critical, particularly in the context of collecting accurate data on COVID-19 vaccination. In the interim, the Australian Government Personal Level Integrated Data project (although not refugee-specific) offers detailed valuable data on country of birth, language spoken, age group and suburb that can be linked to AIR data to estimate vaccine coverage data for refugees as a proxy.[19] Robust recording and reporting of vaccine uptake will support decision-making at all levels of government and guide public health policymaking, programming

and implementation of targeted initiatives to increase vaccination coverage for refugees.

4. Identify barriers, enablers and behavioural factors determining vaccination uptake among refugees and develop tailored approaches, including communication and advocacy strategies

The Tailoring Immunization Programmes (TIP) approach developed by the WHO is a practical, evidence-based framework that aims to integrate people-centred research and behavioural insights into immunisation program delivery specifically targeted for under-vaccinated and potentially vaccine-hesitant groups.[20] The TIP approach reiterates the need to explore environmental and institutional factors, social and protective factors, personal motivation and health worker encounter factors, as a gateway to optimising vaccine uptake for under-immunised groups. The TIP approach has been implemented successfully in regional New South Wales, resulting in childhood immunisation coverage rates increasing from 62.3% (2016) to 86.2% (2020).[21] While the communities involved were not specifically people of refugee background, the TIP approach has the potential to increase vaccine uptake for underserved groups like refugees. The TIP approach, complemented by data collection resources such as the WHO Behavioural and Social Drivers of Vaccination (BeSD) tools[22], can provide rich data on barriers and enablers to vaccination. Such data can provide insights into the design, implementation, and evaluation of vaccination programs targeting refugees. Co-production with refugee communities should be considered in developing vaccination programs that are tailored to meet the population's specific needs.

5. Improve training and awareness of healthcare providers on the needs and cultural and social perspectives of refugees.

The WHO reiterates the need for "training opportunities that include guidance on inclusive and culturally sensitive vaccination service delivery for refugees".[14] Training needs to include a comprehensive overview of the health needs of different refugee groups, risks for vaccine-preventable diseases and under-immunisation, and the intersecting factors influencing vaccine uptake.[14] Online, multimodal, evidence-based training programs that enhance healthcare providers' cultural competency and equip them with requisite knowledge and confidence in immunisation service delivery for refugees have the potential to improve vaccine access and uptake for refugees.[23]

Conclusion

The COVID-19 pandemic is a grave reminder of immunisation as a critical public health strategy for communicable disease prevention and control. Continuing routine immunisation services and catch-up vaccination, particularly for already underserved groups like refugees, is now needed. An integrated and multifaceted approach involving policymakers, stakeholders in immunisation service delivery and refugee communities is key to improving immunisation rates for refugees in Australia.

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Competing interests

None declared.

Author contributions

AM designed, drafted and revised this manuscript.

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